

III. HOUSE AND RISER CABLE

A. Introduction

A component of Bell Atlantic's presentation dealt with the issue of house and riser cable ("HARC"), the portion of the local distribution plant that is located inside multi-tenant buildings, either commercial or residential. Bell Atlantic has proposed rates for house and riser service to address the situation in which a CLEC provides its own link to its end-user customer but requests that Bell Atlantic provide the house and riser cable within a multi-story building. Because this portion of the Bell Atlantic filing raises issues distinct from the general NRC study discussed above, we treat it here in a separate section.

Bell Atlantic undertook the HARC cost study to determine the one-time and recurring costs of establishing interconnection of another carrier's facilities to HARC owned by Bell Atlantic. The HARC is terminated on 50-pair connecting blocks, usually in one of the lower floors of the building. From these connecting blocks, 50-pair sheathed cable "jumper wires" would be used to connect the end user either to Bell Atlantic's or a CLEC's outside plant.

Bell Atlantic has defined the one-time costs associated with this type of interconnection as those related to the "building set-up," installing a backboard and connecting block, for a total of \$142.19. The recurring costs are based on the use of the HARC itself. The costs are divided between (1) a fixed element -- which covers the cost of the basement terminals, the point-of-termination on an upper floor, and 30 feet of horizontal cabling in the basement -- and (2) a variable element, which covers the riser cabling between floors and includes ten feet of vertical cabling per floor. Bell Atlantic states that the recurring costs are based on the Department-

approved TELRIC method and are presented on a per-pair basis, \$.77 for the fixed portion and \$.02 per floor for the variable portion (Exh. BA-NRC-1, at 22-24; Appendix D, Exhibit II).

B. Positions of the Parties

AT&T has raised a number of objections with regard to the HARC study and to the terms and conditions implicit in that study. In short, AT&T argues that the Department should reject Bell Atlantic's proposed mandatory charges for HARC and should instead allow CLECs to gain access to HARC in the most efficient manner possible.

First, says AT&T, a CLEC should be allowed to install its own terminal block and connect it directly to Bell Atlantic's terminal. Under the Bell Atlantic proposal, a third terminal block would be installed between the CLEC terminal block and the Bell Atlantic terminal block. AT&T terms this third block "superfluous" and resulting in an unnecessary cost to the CLEC. AT&T asserts that there is no dispute that a cross-connection could be made directly from the CLEC terminal to the Bell Atlantic terminal (AT&T Brief at 52-54).

Second, AT&T argues that a CLEC should be able to complete its own cross-connects to Bell Atlantic's terminal and to do its own HARC repairs. There is no reason, asserts AT&T, that a trained CLEC technician could not adequately perform the cross-connection. The approach suggested by Bell Atlantic, in which its technician would have to make the cross-connection would, according to AT&T, be cumbersome, requiring extra coordination between Bell Atlantic and the CLEC to ensure that a customer's service was transferred at the appropriate time and efficiently maintained in the event of trouble reports, in addition to adding unnecessary costs. AT&T claims that Bell Atlantic has offered no substantive support for its requirements.

attributing them only to a policy decision made by Bell Atlantic (id. at 54-62).

Finally, AT&T argues that Bell Atlantic should be required to tell CLECs what HARC facilities it owns. The existence of a comprehensive list of such facilities would avoid a CLEC's having to perform unnecessary and burdensome research each time it plans to market services in a particular building (id. at 62).

On the first two points, Bell Atlantic states that the installation of a 50-pair terminal block to serve as the CLEC's point of interface is not superfluous. Rather, it provides an important means to isolate troubles between Bell Atlantic and CLEC facilities, serving as a test-access point to sectionalize any maintenance problems between facilities. Bell Atlantic also responds that AT&T's proposal to allow CLEC technicians to carry out cross-connects would cause Bell Atlantic to "forfeit a secure network" by unnecessarily increasing the chance of third-party human errors and significant operational and maintenance problems. Bell Atlantic draws an analogy in this situation to that addressed by the Department in its arbitration with Covad Communications Company, in which Covad was denied the right to install collocation equipment in the midst of Bell Atlantic's equipment in central offices.⁷ Covad/Bell Atlantic Interconnection Agreement, D.T.E. 98-21 (1998) ("Covad"). Bell Atlantic states that the added costs of its proposal are insignificant compared to the risks of outage that might affect the

⁷ A decision issued by the FCC reverses our findings in Covad in which we found that the security risks of unsecured cageless collocation to the public-switched network outweighed any efficiency gains. See Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket No. 98-147, First Report and Order and Further Notice of Proposed Rulemaking, FCC 99-48 at ¶ 19 n.27, adopted March 18, 1999.

CLECs' customers and Bell Atlantic's customers (Bell Atlantic Brief at 98-100; Bell Atlantic Reply Brief at 30-31).

Bell Atlantic does not respond to the third point regarding providing a comprehensive list of facilities.

C. Analysis and Findings

We start, first, by noting that no parties have questioned the congruence between Bell Atlantic's HARC cost studies and the requirements of the Department-approved TELRIC method. We have reviewed the HARC study and find it in compliance with that method and therefore approve it.

We turn now to the terms and conditions surrounding the provision of HARC service which have been raised by AT&T. We find no basis for a requirement that a separate terminal block be installed between the Bell Atlantic terminal block and the CLEC terminal block. Similarly, we find no basis for a requirement that Bell Atlantic technicians have the exclusive right to make the cross-connection between the Bell Atlantic terminal block and the CLEC terminal block. On these issues, Bell Atlantic's testimony is simply not convincing. Bell Atlantic's repetition of the need to "standardize" the interface by having an additional terminal block carries little weight. For example, Bell Atlantic points to the need to have a test point to sectionalize any maintenance problems between facilities (Exh. BA OSS/NRC-10, at 9). This statement ignores the fact that each of the terminal blocks provides exactly that capability. From the Bell Atlantic terminal block, one can test the HARC facilities leading up to the end-user. Likewise, from the CLEC terminal block, one can test the CLEC outside plant facilities. This

only leaves the jumper cable between the two blocks, which can be tested by placing sensors on either or both terminal blocks (see, Tr. 35, at 134-140; Tr. 36, at 5).

Likewise, Bell Atlantic's statement that CLEC technicians should not be permitted to make cross-connections because "it's very easy to put other people out of service if you're careless" (Tr. 23, at 51) may be true, but it is not dispositive of this issue. There is no evidence on this record, and simply no reason to believe, that trained CLEC technicians will be any more or less careful than trained Bell Atlantic technicians. Bell Atlantic's reliance on the Department's Order in the Covad arbitration is misplaced. There, our concern was the introduction of multiple third-party technicians in the highly complex environment of the main distribution frame of the central office, where the security of service to tens of thousands of customers was at stake. Here, the analogy is more closely tied to the arrival of third-party technician in installing customer premises equipment. The Bell Atlantic HARC -- while obviously tied to the network -- serves a limited number of customers in a given building. If a technician -- whether Bell Atlantic or CLEC -- makes an installation error, it may surely affect one or more customers in that building, but the potential problem is orders of magnitude less significant than the problem of sabotage or error in a central office. If experience refutes this conclusion, there are remedies available.

Bell Atlantic's proposals in these two areas would add costs and logistical complexity to the connection of CLEC customers to Bell Atlantic-owned HARC. Bell Atlantic has offered insufficient countervailing arguments to those presented by AT&T. Accordingly, we eliminate the requirement for a third termination block and for Bell Atlantic to perform cross-connection activities. To the extent that a CLEC chooses to have Bell Atlantic perform those activities, the

relevant charges contained in the HARC cost study will apply.

On the third issue, Bell Atlantic's witness testified that Bell Atlantic could provide a listing of the buildings in which it owns HARC (Tr. 23, at 46). AT&T has made a compelling case that the provision of this information would be important to the CLECs by permitting them to avoid the cost of conducting unnecessary research when planning to market services to a particular building (Exh. TCG OSS/NRC-1, at 14-15). Accordingly, we direct Bell Atlantic to provide this information to requesting CLECs. In conclusion, the Department directs Bell Atlantic to submit its house and riser cable compliance filing within 28 days of the date of this Order.

IV. OPERATION SUPPORT SYSTEMS

A. Introduction

Bell Atlantic has proposed to establish rates to recover a portion of approximately \$108 million in expenditures and approximately \$18 million in ongoing costs which it states were incurred to modify and provide CLECs with access to OSS covering New York and New England. Bell Atlantic asserts that these expenditures reflect the direct costs of compliance with the requirement to provide access to OSS and further asserts that the recovery of such costs is specifically provided for in the Act and the FCC's Local Competition Order (Exh. BA-OSS-1, at 2; Bell Atlantic Brief at 4).

1. Description of OSS Functions and Expenses

Mr. Kelly provided a detailed explanation of the types of expenses included in Bell Atlantic's filing. These expenses include: (1) the costs to develop and implement the Direct

Customer Access System ("DCAS"), which provides the interface which CLECs use to interact with Bell Atlantic for pre-ordering, ordering, maintenance, provisioning, and billing; (2) the costs to modify Bell Atlantic's ordering, provisioning, and billing systems to accommodate the ordering, provisioning, and billing of resold services and UNEs; and (3) the cost to establish a resale service center and a service center for UNEs. Mr. Kelly stated that Bell Atlantic took these steps to accommodate the FCC's requirements in the Local Competition Order and to meet the requests of CLECs in collaborative sessions and in discussion with individual carriers (Exh. BA-OSS-1, at 2-3, 8). Mr. Kelly further asserts that the systems and processes chosen by Bell Atlantic to carry out these functions are the most advanced and efficient available (id. at 7).

To provide a context for these costs, Mr. Kelly explained the functions provided by the OSS. Pre-ordering is the process whereby CLECs and Bell Atlantic interactively exchange information about current and proposed customer products and services and UNEs. The functionalities included in these processes include access to customer service records; access to telephone number selection; the ability to determine the availability of features in a particular central office or for a particular NXX code; the ability, while the end-user is on the line, to select an order date and to determine whether resources are available to schedule any outside work; the ability to validate addresses; the ability to check all channels on a T1 or T3 facility to determine whether they are working or spare; the ability to determine if a loop is conditioned for ISDN service; and the ability to determine the common language location identification code for a given switch. Mr. Kelly noted that several different systems and databases provide these pre-ordering functions. They are the premises information system ("PREMIS"); the customer record

information system ("CRIS"); the BMEX/REX System, which maintains an inventory of the tariffed features and products available at each switch; SMARTS, which is used to determine order due dates in a given geographic region; the trunk inventory record keeping systems ("TIRKS"); and Phoenix, which facilitates ISDN ordering. He explained that even where these systems needed no modification themselves, there was a need for new "gateway" or interface systems to provide CLECs with access to them. This ability was developed in the DCAS interface (id. at 4, 9-12).

Ordering is the process whereby CLECs submit requests for products, services, and UNEs. DCAS provides the front end vehicle for a CLEC to submit an order to Bell Atlantic. Then the service order processor ("SOP") system performs a series of edits to determine if an order's format is correct; distributes the order to other OSS and work groups; and then updates the status of the service order based on updates from the provisioning and billing systems. The SOP system was modified by Bell Atlantic to accept, identify, and process orders from resellers and UNE purchasers (id. at 4, 12-13, 18-21).

Provisioning is the step in which Bell Atlantic executes CLEC requests for products, services, and UNEs. The provisioning process involves systems that determine which facilities to assign to an order, update switch translations, perform manual processing, and dispatch technicians. The primary systems used in the provisioning process are the service order analysis and control ("SOAC") system; the loop facility assignment and control system ("LFACS"); MARCH/ASAP, which formats the switch translations and sends them to the switch; SWITCH, which inventories, maintains, and assigns central office facilities; and TIRKS. Mr. Kelly said

that minor modifications of these systems were required to use these systems for resellers, but major modifications were needed to handle UNEs (id. at 4, 13-14).

Maintenance is the process by which CLECs request and receive acknowledgments and status reports on repairs of products, services, and UNEs. The functions involved in maintenance and repair are testing, screening of test results, creation of trouble tickets, dispatch of technicians, status reporting, trouble ticket close-out, and trouble history reporting. These functionalities are contained in the work and force administration system ("WFA"); the mechanized loop testing system ("MLT"); the special access remote tester system ("SARTS"); DELPHI, which analyzes MLT and SARTS results to isolate trouble locations; and the loop maintenance operations system ("LMOS"). These systems, said Mr. Kelly, required modifications to identify the carrier making the maintenance request and to permit notification to that carrier as work progresses. Further, as noted above, there was a need to establish access to these maintenance systems through DCAS (id. at 4, 14-16).

Billing is the process by which Bell Atlantic provides the data needed by a CLEC for end-user billing and wherein CLECs and Bell Atlantic interactively process claims and adjustments. This process requires an inventory of billable products and services, collection of usage information, rating, bill formatting, transmission of data, processing of payment, and a process for handling claims. The relevant systems are CRIS and the carrier access billing system ("CABS"), both of which were extensively modified, stated Mr. Kelly. Modifications offer CLECs access to the systems; provide the ability to rate Bell Atlantic's service on the discounted wholesale price, rather than on the retail price; include rate elements for UNEs; and generate bills

in a format requested by the CLECs. In addition, a new system called the claims adjudications record management and adjustment ("CARMA") system was developed to provide an electronic means for CLECs to submit billing claims to Bell Atlantic for processing and to provide CLECs with daily reports on the status of submitted claims (id. at 4, 16-17).

Mr. Kelly explained that the costs associated with making OSS accessible to the CLECs include both one-time development costs and ongoing costs, which fall into the following categories: expenses incurred to develop new system interfaces and functionalities; expenses incurred to change the pre-existing support systems to permit access by third parties; expenses incurred to define the methods and procedures for OSS access; capital requirements and other expenses related to investments in additional memory, workstations, processors, and other computer equipment; and ongoing maintenance and upgrade costs associated with the new system interfaces and functionality. Costs were recorded along the functional lines discussed above -- pre-ordering, ordering, provisioning, maintenance, and billing -- along with three other categories -- other (project management of the OSS project, training for CLECs and Bell Atlantic personnel, the establishment of the resale service center), credit/collections, and operator services (id. at 21-24).

2. Development of Total Costs

Mr. Kelly stated that the OSS cost information was used by Mr. Minion, who added loadings for benefits and payroll taxes, adjusted the expenses in time to bring costs to a 1996 time frame; levelized those costs over a five- or seven-year recovery period; and assigned them to the two categories of transaction -- per account and ongoing. He also provided capital costs

and other added costs for the service management line information database, call usage detail, and customer service record retrieval (id. at 3).

Mr. Minion testified that Bell Atlantic's cost studies used a forward-looking, incremental cost construct that is consistent with the TELRIC method. He asserted that the studies are forward-looking in that they calculate Bell Atlantic's best estimate of the costs to establish the OSS functionalities and interfaces and ongoing costs to maintain those new or modified system functionalities and interfaces. That best estimate of costs, he stated, is provided by the costs actually incurred by Bell Atlantic. Further, he cited Mr. Kelly's testimony to support the proposition that the new OSS are the most efficient currently available (Exh. BA-OSS-2, at 5-6). Mr. Minion also explained that Bell Atlantic has presented region-wide OSS costs (i.e., for the combined New York and New England states) because the underlying costs are common to that region and are not segregable by state. They reflect costs of processes and systems which are centralized and service customers from all of the states (id. at 6-7).

Mr. Minion developed three categories of costs: (1) one-time development costs assigned to transactions; (2) other one-time costs to be assigned to each CLEC account; and (3) ongoing costs assigned to transactions. The first category included amounts allocated to the development of the pre-ordering, ordering, billing, and maintenance functionalities. These included the actual 1996 dollars expended and the budgeted 1997 dollars for three organizations within Bell Atlantic: process re-engineering and assurance; engineering, science, and technology; and information services. The second category of one-time costs assigned to "per account" included the estimated cost of the resale service center; the costs associated with provisioning; operator

services; and project management and training. Thirdly, ongoing costs assigned to transactions included the annual ongoing capital costs associated with the OSS-related investments and an estimated annual ongoing maintenance cost of the billing and provisioning systems. The latter was assumed to be equal to 15 percent of the initial billing and provisioning development expense (id. at 17-19).

3. Rate Development

Mr. Kelly explained that Mr. Orosz then developed rates for the elements in each of those categories using the cost information provided by Mr. Minion and demand estimates developed by Mr. Orosz (Exh. BA-OSS-1, at 3). Mr. Orosz testified that a rate structure consisting of monthly recurring charges for CLECs and uniform per-transaction charges was desirable in that it would reflect the benefits that CLECs will derive from the OSS interfaces. A portion of that benefit, he said, can reasonably be attributed to the existence and availability of the interfaces on a when-and-as-needed basis. This component is reflected in the monthly recurring charge. Another portion of the benefit, he asserted, is reflected in the extent to which the systems are used, and this is reflected in the per-transaction charge. A transaction is defined as an event that causes or triggers some action by Bell Atlantic at the request of a CLEC. Examples of transactions are "address validation" and "order status query" (Exh. BA-OSS-4, at 5, 8. Workpapers Part J). Under Bell Atlantic's proposed rate structure, a CLEC would pay a monthly recurring charge of \$2,557 if it offered resale service and \$4,907 if it offered UNEs. This charge would stay in place for a "recovery period" of five years. The cost charged per transaction would be \$1.19, until development costs are fully recovered -- in seven years -- after which it would

drop to \$0.38. There are also separate charges for use of databases (Exh. BA-OSS-5, Workpapers Part I). Since the rate elements presented are based on estimated levels of demand, Bell Atlantic proposes to track total OSS revenues to ensure that, once the total and allowed development costs have been recovered, the portion of those rate elements that recover one-time system development costs will be eliminated. The tracking mechanism, states Mr. Orosz, will also enable mid-course rate adjustments to be made, with the goal of spreading recovery of total development costs as nearly as possible over the proposed recovery period (Exh. BA-OSS-3, at 10).

B. Positions of the Parties

We provide here an abbreviated description of the parties' positions, with more detail to follow below on those issues on which we rule. AT&T argues that the Department should reject Bell Atlantic's proposed charges for recovery of OSS costs, for several reasons. First, states AT&T, the proposed OSS charges are based on backward-looking cost estimates of historic expenses that were already reflected in retail rates and access charges, already incorporated in the Department-approved UNE and resale rates, or both. Second, says AT&T, the CLECs are not the causes of Bell Atlantic's OSS costs, and Bell Atlantic should not be allowed to shift its competition onset costs to its competitors. Third, AT&T asserts that, if the Department were to adopt Bell Atlantic's OSS study, Massachusetts could bear a disproportionate share and possibly all of region-wide OSS costs (AT&T Brief at 5-26).

MCI joins in many of the same arguments raised by AT&T, as well as an additional one. MCI asserts that the CLECs are not the cause of the costs of Bell Atlantic's OSS investments:

that each carrier including Bell Atlantic should bear its own costs of developing OSS; that these costs, if the result of state and federal mandates, should be included as part of Bell Atlantic's annual price cap compliance and not in the present proceeding; and that if Bell Atlantic is permitted to recover competition onset costs, they should be imposed on all carriers including Bell Atlantic (MCI Brief at 18-24).

Bell Atlantic disputes all of these points, claiming that the costs of system modification and additions were necessary to permit CLEC access to OSS and that the rate structure it has proposed is consistent with the FCC's defining OSS to be UNEs (Bell Atlantic Brief at 23-43; Bell Atlantic Reply Brief at 3-13).

C. Analysis and Findings

1. Appropriate Forum

The threshold issue we must address is whether this arbitration proceeding is the proper forum for applying OSS-related costs as fees to be paid by the CLECs. MCI has argued, that if, as Bell Atlantic contends, the alleged OSS costs are a result of various state and federal regulatory mandates, then the only place in which recovery of these costs can be considered is under the price cap regulatory regime adopted by the Department in D.P.U. 94-50. Ms. Baldwin testified that the types of costs included by Bell Atlantic in the current filing would be considered as exogenous under that regime in that they would result from "regulatory, judicial, or legislative changes uniquely affecting the telecommunications industry." Accordingly, she argues, Bell Atlantic should request recovery of such costs in an annual price cap filing, where it would bear the burden of proving the propriety of such expenses (Exh. MCI-OSS/NRC-3, at 23-24.

Exh. AT&T-OSS/NRC-3, at 7-8).

Bell Atlantic replies that the recovery of OSS costs are governed by the Act and therefore it is entirely appropriate to treat the recovery of such costs separately from those costs subject to the Department's price cap Order. This is so, says Bell Atlantic, because OSS are UNEs under the Act and the FCC's regulations. As such, Bell Atlantic has a right to recover the costs for those UNEs under the pricing rules of the Act. Bell Atlantic argues that it would be illogical to recover the costs of OSS UNEs as exogenous costs while other UNEs are priced according to the terms of the Act (Bell Atlantic Brief at 37-38; Bell Atlantic Reply Brief at 13).

Bell Atlantic misconstrues our obligations under the Act and the FCC rules. The pricing of UNEs, per the TELRIC method, is not an exercise in cost recovery. Its purpose, as stated by the FCC, is to provide an estimate of forward-looking costs of a hypothetical telecommunications network using efficient technology to serve current and reasonably expected levels of demand and customers, assuming the same geographic distribution of central offices as are currently in place. Local Competition Order at ¶ 685; Phase 4 Order at 14-15. Bell Atlantic has clearly included historic costs in its OSS pricing. A TELRIC proceeding is not the place to enable or ensure that an incumbent local exchange carrier recovers its historic costs. To the extent that our ruling in this case does not permit Bell Atlantic to include in UNE rates the number of dollars it asserts are properly the result of exogenous factors -- like the Act and the FCC rules -- its forum for attempted recovery of those costs is the annual price cap filing.

Because OSS have been defined as UNEs by the FCC, it is appropriate to carry out a

TELRIC study for determination of rates to be assigned to the CLECs.⁸ It is to the design of Bell Atlantic's TELRIC study that we now turn.

2. TELRIC Study

Although the CLECs have raised issues concerning the propriety of including certain portions of OSS costs in this analysis -- stating that many of those cost would have been incurred by Bell Atlantic on its own, or that many of those costs create benefit for Bell Atlantic -- we defer those topics for the moment. Instead, the Department focuses on the another point raised by AT&T, which asserts that Bell Atlantic's proposal would result in double-counting of costs. The reason, says AT&T, is that the OSS costs Bell Atlantic is seeking to recover were placed in certain Part 32 USOA accounts for financial reporting purposes. However, amounts from the same USOA accounts were used to develop the joint and common cost factors for Bell Atlantic's recurring charges in the earlier phases of this arbitration proceeding (AT&T Brief at 14).

Bell Atlantic replies that this contention is groundless, arguing that its development of OSS was incremental to any development work it had performed in the past and was designed solely to meet the requirement of the Act for access to OSS UNEs. Bell Atlantic describes AT&T as "confused" between the costs Bell Atlantic incurred in the past for development and

⁸ On January 25, 1999, the Supreme Court vacated the FCC's Rule 319, which designated the range of UNEs to be provided to CLECs. AT&T Corp. et al. v. Iowa Utilities Board et al., No. 97-826, slip op. (U.S. January 25, 1999). On April 16, 1999, the FCC issued a notice of proposed rulemaking to redefine those network elements which must be unbundled by ILECs. Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, Second Further Notice of Proposed Rulemaking, FCC 99-70, released April 16, 1999.

maintenance of its OSS needed to operate its business with the cost of UNE access, a new federal requirement (Bell Atlantic Reply Brief at 6-7).

We find that AT&T's argument has merit. When we approved Bell Atlantic's TELRIC method in the Phase 4 Order, we accepted its use of historic OSS development and maintenance costs to create an index to measure and assign forward-looking joint and common costs to UNE recurring rates. In that Order, we constructed a ratio between current (*i.e.*, 1995) joint and common costs and historic investment costs, to create a factor that would be applied to facilities' investments to determine an overall forward-looking recurring cost for UNEs like loops, switching, and transport. We then modified that ratio modestly to reflect the potential for likely future improvement in the efficiency of Bell Atlantic's operations. Phase 4 Order at 58-61. That cost factor was based, in part, on Bell Atlantic's expenses in the same categories of expenses for which it now seeks recovery in this proceeding (Tr. 27 at 54-56, 59; Exh. BA-NRC-2, Attachment E (reprint of Bell Atlantic TELRIC compliance filing of March 14, 1997)).

Mr. Minion offered his opinion that this point is not relevant because the recurring cost TELRIC studies and the OSS cost studies involve the use of different base years (1995 versus 1996-1997, respectively.) He stated, "[s]ince the two sets of expenses belong to disjoint universes and the intersection of disjoint sets is the null set, the expenses reflected in the [OSS cost study] exhibit cannot have been included in the development of the annual charge factors or fully assigned labor rates" (Tr. 12, at 56-58). However, as properly noted by AT&T, in the context of a forward-looking cost study, that distinction is without merit. For purposes of a forward-looking cost study, the choice of a particular base year is of limited significance (AT&T

Brief at 14). Indeed, it would be a matter of chance that the revenues collected by TELRIC-based rates would, in any particular year, equal the actual operating expenses of the incumbent carrier. The purpose of the TELRIC study is not cost recovery. It is assignment of forward-looking costs as rate elements for the provision of UNEs. In the Department's Phase 4 Order, we have already assigned the categories of costs sought by Bell Atlantic in this proceeding to the recurring rates established for UNEs. Further, those joint and common cost factors were also used in the development of the resale rates in the Phase 2 Order. Thus, to permit Bell Atlantic to now assign these same costs to OSS would result in a double-counting of these costs. We cannot permit this to occur. Accordingly, the OSS cost study and the resultant rates proposed by Bell Atlantic in this proceeding are not approved.

3. Other Issues

Although the Department has ruled on the general propriety of Bell Atlantic's OSS cost method and found it lacking, there are other issues raised by the parties that warrant further comment. These issues are sufficiently important that, even if we had found Bell Atlantic's cost study method to be sound, they would foreclose the possibility of our approving the rates proposed in this proceeding. We therefore address these issues now in order to offer advice to Bell Atlantic for future filings.

a. Nature and Benefits of OSS Improvements

The CLECs have argued that many of the improvements installed by Bell Atlantic in its OSS are of the type and nature that would be likely to have been installed by Bell Atlantic in the normal course of system upgrades and improvements, especially as the telecommunications

market has become more competitive. They further assert that Bell Atlantic reaps benefits from these improvements that should be factored into any attempt to recover the costs of such systems exclusively from the CLECs.

Dr. Selwyn, in providing a thorough and extensive history of the evolution of telecommunications OSS, testified that the improvements of Bell Atlantic's OSS were not driven by regulatory or legislative mandates. Instead, efforts to mechanize, automate, integrate, and unify OSS were initiated as part of an effort by the telecommunications industry in response to the incumbent carriers' concerns about their own efficiency and competitiveness. He explained that such efforts would permit increased utilization of plant resources through improved inventory management; reduce fallout; improve the rapidity and accuracy with which network faults can be identified and corrected; reduce the need for on-site inspections and repairs; improve labor productivity; and improve demand forecasting and construction planning. Dr. Selwyn noted that modern integrated OSS improve an incumbent's service quality by enabling it to offer customers more rapid fulfillment of service orders and other requests and also reduce the interval between receipt of a service complaint and its correction. These improvements have even led to the ability of large customers to be provided with direct on-line access to incumbents' databases and other resources for entering service orders, performing testing operations, and other transactions that reduce the need for intermediate customer service contacts. Dr. Selwyn concludes that, with very few modifications, the same advanced OSS will facilitate regulatory compliance with the Act and FCC rules but that the underlying motivation for Bell Atlantic's OSS changes are consistent with its own business interests and plans and would be prudently

pursued by Bell Atlantic without any regulatory requirement whatsoever (Exh. AT&T-OSS/NRC-1, at 13-18).

Bell Atlantic strongly disputes Dr. Selwyn's interpretation of the moving force behind OSS improvements (Bell Atlantic Brief at 7). Mr. Kelly testified that no expenditures for which recovery was being sought in this proceeding were directed towards improving the basic functioning of Bell Atlantic's underlying OSS themselves (Exh. BA-OSS-1, at 7). He further asserted that, although Bell Atlantic is continually implementing process improvement programs, the OSS modifications included in Bell Atlantic's filing would not have been made but for the requirements of the Act and the FCC's determination that OSS are UNEs. He testified that the modifications do not increase the efficiency of Bell Atlantic's existing, underlying processes, and in some cases actually make the Bell Atlantic OSS less efficient. Mr. Kelly asserts that Dr. Selwyn has over-simplified the case; relies on global, not Bell Atlantic-specific information; and ignores the fact that the specific OSS improvements included in this filing were those that resulted from collaborative meetings between Bell Atlantic and several CLECs. Mr. Kelly then provides several specific examples of such system changes (Exh. BA-OSS/NRC-7, at 2-16).

While not addressing the specific examples cited by Mr. Kelly, Dr. Selwyn responds that the kinds of improvements made by Bell Atlantic to its OSS enhance Bell Atlantic's own competitiveness in a multi-carrier local service environment. In such a competitive environment, Dr. Selwyn asserts, Bell Atlantic can be expected to compete aggressively both to retain its existing customer base and to win back customers who have switched to a CLEC. In this environment, OSS upgrades would be necessary to process increased volumes of transactions

and to process win-back orders, even if they were not also required to accommodate and process orders initiated by the CLECs (Exh. AT&T-NRC/OSS-11, at 22-23).

The fact that there are shared benefits from OSS upgrades, state the CLECs, also argues for a different ratemaking treatment of any costs associated with those modifications. Instead, the costs should be imposed in a competitively neutral manner on all carriers, including Bell Atlantic. This could be done, for example, by assessing such charges upon all carriers based on the proportion to their total number of access lines (Exh. AT&T-OSS/NRC-5, at 37; AT&T Brief at 20-21; MCI Brief at 19).

Bell Atlantic disputes this assertion, stating that the CLECs are the true causes of its OSS upgrade costs and, under basic economic principles, should be solely responsible for bearing the burden of these costs going forward. There is nothing inequitable, says Bell Atlantic, in imposing on a new entrant (a CLEC) a cost that another competitor (Bell Atlantic) is not required to bear where the costs are caused only by the former. Requiring firms to absorb their competitors' costs, it asserts, will distort economic decision-making by forcing artificially high cost structures and therefore high prices on the firms providing the subsidy (Exh. BA-OSS-6, at 3; Bell Atlantic Brief at 36; Bell Atlantic Reply Brief at 9).

The Department appreciates the "chicken-and-egg" aspect of this debate. Putting aside one or two examples of a reduction in operating efficiency, it is clear that the kinds of improvements made to the OSS enhance both the ability of the CLECs to carry out their business and the ability of Bell Atlantic to remain competitive in a rapidly changing telecommunications environment. As Dr. Selwyn notes, for example, Bell Atlantic's attempt to win back customers

from other carriers is enhanced by an integrated OSS, permitting Bell Atlantic to quickly and efficiently locate the facilities used by the customer, process the service order, and provision any facilities needed to return the customer to Bell Atlantic. We cannot know whether, absent the Act, Bell Atlantic would have made all of the specific OSS changes it included in this proceeding; but we can conclude that, absent the Act, naturally occurring increases in telecommunications competition would have likely provoked Bell Atlantic to make some similar changes to maintain its competitive posture in the marketplace.

In light of this conclusion, if and when Bell Atlantic seeks cost recovery for OSS improvements in a future price cap filing, it should be prepared to demonstrate why the CLECs' characterization of these systems is incorrect. Bell Atlantic must offer the Department a clear distinction between those costs which are truly exogenous and those which would be considered good business practice by Bell Atlantic notwithstanding the existence of federal regulatory requirements.

Also, because the CLECs have made a persuasive presentation that many of the OSS improvements bring benefits to Bell Atlantic, as well as the CLECs, a rate design that assigns all of the costs of OSS upgrades to the CLECs does not appear appropriate. A better approach may be to allocate costs with reference to the total number of access lines. We share the CLECs' concern about the anticompetitive aspects of Bell Atlantic's proposed pricing regime that allocates all costs to CLECs, and we direct Bell Atlantic to offer an alternative approach to pricing if it chooses to attempt recovery of OSS modification costs in a price cap proceeding.

Regarding recovery of OSS costs in a price cap proceeding, the Department recognizes

that exogenous cost adjustments normally are made to the price cap indices, and not to any specific rate element, as we suggest here. However, adjusting the price indices only would in effect mean that Bell Atlantic's retail customers pick up all of the OSS costs, since network element and interconnection rates are not subject to change pursuant to the price cap.

Accordingly, we believe that it is appropriate for Bell Atlantic to develop a targeted exogenous adjustment and new rate element for any share of OSS costs allocated to CLECs, and direct Bell Atlantic to do so if it chooses to seek recovery of OSS costs in a price cap proceeding.

b. Region-Wide Rate Structure

We now turn to express our concerns about Bell Atlantic's rate design. As best we can understand, if Massachusetts were to approve the per-account recurring OSS charges proposed by Bell Atlantic, but no other state did so, any CLEC engaged in business in Massachusetts would be charged a share of the region's costs, as though that company were engaged in service throughout the region. In contrast, a CLEC providing service in a state without a state-approved OSS charge would face no such monthly recurring fee (Tr. 28, at 37-47). In essence, Bell Atlantic is attempting to assign region-wide OSS development costs to the carriers in those states who first act to approve its proposed OSS rates.

This approach to assigning costs is at such variance with traditional rate-making principles that, even had we approved the cost studies in this proceeding, and even if we had determined that all such costs should be assigned to CLECs, there is no way we could have authorized Bell Atlantic's proposed rate design. There has generally been an allocation or assignment of costs -- even company-wide joint and common costs -- that aligned with the

relevant rate-making jurisdictions. In its desire to ensure collection of its regional costs, Bell Atlantic has adopted a ratemaking principle that "rewards" a state by potentially assigning the entire region's OSS development costs when that state adopts Bell Atlantic's costing and pricing premises. We are prepared to cooperate with other states' regulatory bodies in this arena, but only if Bell Atlantic offers a proposal that has some basis in commonly accepted regulatory practice.

4. Other Rate Design Issues

The CLECs argue that, should all or a portion of the OSS cost study be approved, a rate design that is based in part on imposing transaction charges has no basis because the OSS costs at issue are not transaction based. They assert that, with the minor exceptions of the costs of computer processing and transaction data storage, the major portion of OSS costs identified in the Bell Atlantic study are system development and ongoing maintenance and capital costs (AT&T Brief at 17-18). Dr. Selwyn testified that the rate design developed by Bell Atlantic substantially overstates the transaction-sensitive systems costs associated with processing individual service order transactions. He notes that OSS development costs are not affected by the volume of transactions and should not be recovered on a per-transaction basis (Exh. AT&T-OSS/NRC-1, at 15). Mr. Ordoover expresses concern that misallocation of competition onset costs to the transaction cost category would create an artificial entry barrier and harm competition because, the higher the transaction costs, the more costly it will be for a new carrier to enter and to switch a customer from the incumbent (Exh. AT&T-OSS/NRC-5, at 20-21).

Bell Atlantic repeats that the costs it has presented are incremental to those required to

meet its own OSS requirements and that charging OSS UNE users on a per-transaction basis is the fairest way to ensure that the cost causer pays its fair share (Bell Atlantic Reply Brief at 7).

We need not decide on the detailed rate design issue here, given the other conclusions we have reached above. However, we offer Bell Atlantic guidance that, in future filings, it should distinguish carefully between costs that are related to the level of usage of OSS and those that are not. The CLECs have made a persuasive case that at least some of the fixed costs associated with OSS upgrades have been assigned on a transaction-sensitive basis. The Department's general principles of rate design are to price a company's services in such a way as to reflect the fixed and variable cost components of those costs.

There is also a particular component of the transaction-based pricing regime proposed by Bell Atlantic that warrants comment. In an earlier stage of this arbitration proceeding, when we were considering performance standards for Bell Atlantic's service ordering, provisioning, and maintenance and repair functions, Bell Atlantic made a commitment that it would not charge CLECs to query the OSS to obtain order status reports on these items (Tr. 13, at 66-73; Bell Atlantic Record Response LD-3; Tr. 14, at 74-76, 81-82; Bell Atlantic Record Response LD-9). The context of the discussion at the time was a request by the CLECs to receive ongoing order status and completion reports from Bell Atlantic. Bell Atlantic responded that it did not produce those reports for its own customers, and so parity did not require similar reports for the CLECs; but it promised to allow CLECs no-charge access to the OSS to obtain this information. In light of this commitment by Bell Atlantic, its proposal now to charge CLECs on a per-transaction basis for such queries cannot be permitted. Mr. Orosz included at least three examples of such

charges in his testimony: providing a CLEC with confirmation that a valid order has been placed; providing a CLEC with the ability to query the current status of a given order; providing a CLEC with the ability to query the current status of a given trouble ticket (Exh. BA-OSS-4, Workpaper Part J). When asked about this issue during his testimony, Mr. Orosz stated that there would be no charge for notification of service order completions by Bell Atlantic to a CLEC (Bell Atlantic Record Response OSS-7). That answer, however, does not correspond to the earlier commitment made by Bell Atlantic. Any future filing should reflect Bell Atlantic's earlier commitment and must exempt order-status queries from any transaction charges.

5. Conclusion

In conclusion, Bell Atlantic has misconstrued this arbitration proceeding as the forum within which to seek cost recovery for exogenous costs related to changes in federal telecommunications regulation. Further, Bell Atlantic has not met its burden of proof in demonstrating that its proposed OSS cost studies properly comply with the TELRIC costing method. If and when Bell Atlantic seeks to refile its TELRIC study and/or seeks recovery of the exogenous costs in a price cap filing, it must be prepared to distinguish which portion of OSS upgrade costs are properly defined as exogenous, from those upgrade costs that are consistent with Bell Atlantic's own commercial operations. At that time, too, Bell Atlantic should propose a competitively neutral rate design under which costs are born by every carrier that benefits from OSS, including Bell Atlantic, and offer a proposal which is generally consistent with multi-jurisdictional regulatory practice. As to other rate design issues, Bell Atlantic should distinguish usage sensitive costs and capacity sensitive costs, and exempt order-status queries from any transaction charges.

V. ORDER

Accordingly, after hearing and due consideration, it is

ORDERED: That Bell Atlantic's NRC proposal is hereby approved as amended herein;

and it is

FURTHER ORDERED: That the NRCM proposal of AT&T and MCI is hereby denied;

and it is


FURTHER ORDERED: That Bell Atlantic file with the Department within 28 days from the date of this Order a NRC compliance filing that incorporates the directives herein; and it is

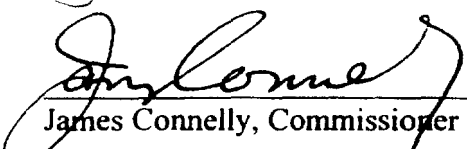
FURTHER ORDERED: That Bell Atlantic's HARC study is approved as amended herein; and it is

FURTHER ORDERED: That Bell Atlantic file with the Department within 28 days from the date of this Order a HARC compliance filing that incorporates the directives herein; and it is

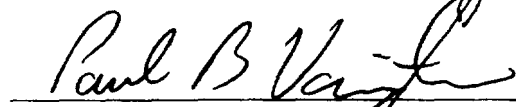
FURTHER ORDERED: That Bell Atlantic's OSS cost study is hereby denied.

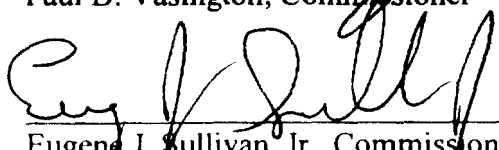
By Order of the Department,


Janet Gail Besser, Chair


James Connelly, Commissioner

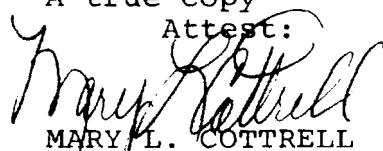

W. Robert Keating, Commissioner


Paul B. Vasington, Commissioner


Eugene J. Sullivan, Jr., Commissioner

A true copy

Attest:


MARY L. COTTRELL
Secretary